CLAIMS

1. A method of transmitting CDMA messages between a base transceiver station and user terminals, wherein:

- symbols of messages to certain user terminals are coded with a coding sequence of 2N bits to produce sequences of 2N chips, and

- the chips are transmitted,

characterized in that:

- symbols of other messages to certain other user terminals are coded with a coding sequence of k2N bits to produce sequences of k2N chips, where k is an integer greater than 1.

2. A method according to claim 1, characterized in that at least two symbols of said other messages are transmitted simultaneously.

3. A method according to claim 2, characterized in that k symbols of said other messages are transmitted simultaneously.

4. A method according to claim 1, characterized in that:

- a radiation cell of a base transceiver station is divided into sectors,

- a common carrier frequency is used for all the sectors of the cell,

- coding sequences are divided into subsets (S1, S2), and

- different subsets are assigned to user terminals which are located in adjoining or contiguous sectors.

5. A method according to claim 1, characterized in that different base transceiver stations of a cellular system transmit chips on a common carrier frequency and with a common pass-band.

A 6. A method according to ~~any one of claims 1 to 5~~ claim 1, characterized in that the symbols or the chips are coded by random bit sequences (PN).

A 7. A method according to ~~any one of claims 1 to 6~~ claim 1, characterized in that a single sequence is concatenated with a repetition of that single sequence or with a complementary single sequence to constitute a coding sequence k2N.

A 8. A method according to ~~any one of claims 1 to 7~~ claim 1, characterized in that decoding subsystems are used simultaneously in a user terminal k to decode in parallel k symbols of a message transmitted to that user.

A 9. A method according to ~~any one of claims 1 to 8~~ claim 1, characterized in that a symbol is decoded in a user terminal with a decoding sequence of length k2N.